

Cultural sheet: Pot Tomato Donna series

Species	
Variety Number Name	420-060 Donna F1 Yellow; 420-090 Donna F1 Red; 420-095 Donna F1 Orange
Species	Lycopersicum esculentum
Trade name species	(Pot/Determinate) Tomato
Type	Annual
Family	Solanum
Seed weight	1,8-25 gram / 1000 sds depending on seed lot and variety
Average germination	85-95%
EU variety name	PDTY420060 Donna Yellow; PDT420090 Donna Red; PDTY420095 Donna Orange
Young Plant	
Nr of Seeds/plug	1 for plug size 1,5-3 cm
Germination days	1-2 days* (biological des-infected seeds can take 2 days more)
Germination temp.	18°-21°C – 64°-70°F Covered and high humidity, no light needed
Grow on days	14-21 days
Grow on temp.	16°-21°C – 61°-70°F
Min. Grow on temp.	16°C – 61°F (This enlarges the Grow on days period)
Max. Grow on temp.	35°C – 95°F This shortens the Grow on days period, encourage stretching internodes
Optimal D/N temp.	21°C/70°F -18°C/64°F
Soil for sowing	Sowing soil with good drainage, EC 1,5 PH 5,8-6,5
Sowing covering	Vermiculite / soil with open structure /app. 2-3 mm thick
Fertilisation in the plug	2,5 EC with each watering, NPK 15-10-15 and micro elements
Ready to transplant	Full rooted plug with short internodes. Small young flower could be visible
Attention points during young plant growing	Reduce the humidity soon after germination to 70%. This prevents stretching of the hypocotyl. For pot tomatoes stretching is not appreciated. The 1-2 week period after cotyledon expansion is the temperature sensitive period, defining when the first bunch shows. Low night temperature exposure (10-15°C) of seedlings, in contrast to day temperatures at 18°-21°C /64°-70°F during this period promotes the initiation and number of flowers (bunches) on the plant, reduces the internodes length and the number of leaf's preceding the first flower bunch. Long days (16 hrs) under relative low light densities increase the dry weight production with 100% compared to short day 8 hrs after 6 weeks from sowing
Finish for grower	
Potting soil	Standard soil with good drainage and also good water storage capabilities EC 2,5 PH 5,8-6,5
Pot-size	15-17cm 6-7" optimal 17 cm/7" or baskets from 25-35cm 10"-14"
Plugs per pot	1 for pots baskets 1/3 plants
Indoor	Final distance indoor 30 cm/12" x 30 cm/12" (10 plts/m2) for pots Final distance indoor 40 cm/16" x 40 cm/16" (5-6 plts/m2) for baskets
Spacing indoor:	Space the plants when the leaf's are reaching each other.
Outdoor in containers	Planting distance 25 cm/10" x 25 cm/10"
Planting soil outdoor	Standard soil with good drainage and also good water storage capabilities EC 1,5 PH 5,8-6,5
Min. Grow on temp.	18°C – 61°F (This enlarges the Grow on days period)
Ideal grow on temp.	21°C-25°C– 70°-77°F
Optimal D/N temp.	23°C/77°F -18°C/64°F
Frost	Plants cannot stand frost.
Watering	Regularly for continues growth, keep the soil moist Watering with minimal. 2,5 EC keeps tomatoes healthy
Crop time to saleable	10-12 weeks after planting, the first bunch starts show colour.
Attention points during plant growing	<ul style="list-style-type: none"> Pinching above the 3rd leaf will create a more compact branching plant. It ill delay ripen fruits for approx.. 10 days. High temp. (27°C average D/N) induce pollen infertility/no fruit set. Within the 21-27°C range a diurnal fluctuation of 5-6oC promotes good pollen fertility.

<p>Attention points during plant growing</p>	<ul style="list-style-type: none"> • Night temperatures of between 16-20°C are ideal. Temperatures below 13°C severely affect the pollination of most cultivars. • Insects, especially bees and bumble bees, support fruit set on tomatoes • Tomato plants have a high fertilization need. When the EC is too low, the leaf's can turn yellow when the fruits are colouring. This also reduces the taste of the fruit. • When the flowers show, increase the EC in to 3-4, to keep the fertilisation in the pot high enough. (EC in the pot can go up to 7-9) • Tomato plants/leaf's can be made sturdier by spraying (MgSO₄ -bitter salt and Dipotassium-sulphite (K₂SO₃)) solutions on the plants (possible combined with other chemicals which need to be used). This has a positive effect on the leaf size and colour • Clay in the soil will stabilize fertilization variation and reduce stretching. 2-5% is advisable, can be increased to 10%. Potassium-phosphate (MKPO₃) in a concentration of 0,1% improves the quality of tomato plants. This is a good method against phytophthora. For all tomatoes this can lead to a significant reduction of failures.
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Consumer use	
Use	Compact snack tomato for indoor use Compact snack tomato for outdoor use in patio and balcony pots Compact snack tomato for kids garden
Unique specifications	<ul style="list-style-type: none"> • Fruit weight; depends on culture, from 25-50 gr/fruit. • High temperatures (27°C average D/N) induce pollen infertility/no fruit set. Within the 21-27°C range a diurnal fluctuation of at least 5-6°C promotes good pollen fertility. • Night temperatures of between 16-20°C are ideal. Temperatures below 13°C severely affect the pollination of most cultivars. • Insects, especially bees and bumble bees, support fruit set on tomatoes • Tomato plants have a high fertilization need. After germination watering with 2,5 EC with macro and micro elements supports growth. • Clay in the soil will stabilize fertilization variation

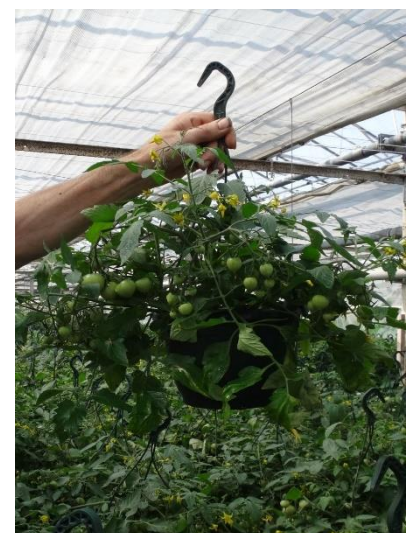
Pictures	
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Young Plant



17 cm tall container, not pinched



22cm basket pinched



15cm pot pinched above the 3rd leaf



22cm basket pinched above 1st bunch



Outdoor 35 cm container



Outdoor 35cm container, grafted, Donna Yellow 17 cm pot
all bunches to the front

